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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,550	08/07/2006	Chang Sung Seok	043946-2	8299

25570 7590 09/29/2008  
ROBERTS MLOTKOWSKI SAFRAN & COLE, P.C.  
Intellectual Property Department  
P.O. Box 10064  
MCLEAN, VA 22102-8064

EXAMINER
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LE, DAVID D

ART UNIT	PAPER NUMBER
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3681

NOTIFICATION DATE	DELIVERY MODE
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09/29/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

lgallaugh@rmsclaw.com  
dbeltran@rmsclaw.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/588,550	<b>Applicant(s)</b> SEOK, CHANG SUNG	
	<b>Examiner</b> David D. Le	<b>Art Unit</b> 3681	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 August 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 August 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>07/30/07</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This is the first Office action on the merits of Application No. 10/588,550, filed 07 August 2006. Claims 1-4 are pending.

#### **Documents**

2. The following documents have been received and filed as part of the patent application:
  - Copy of Foreign Priority Document, received on 08/07/06
  - Information Disclosure Statement, received on 07/30/07

#### ***Drawings***

3. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Specification***

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the

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abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

5. The abstract of the disclosure is objected to because it exceeds 150 words and contains legal phraseology, "said". Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. **Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

#### **Claims 1-4:**

- Claim 1, line 6 recites the limitation "vehicle". It is unclear whether this newly recited "vehicle" is different from the one, which is first recited on line 4 of claim 1.

- Claim 1, line 11 recites the limitation “its”. It is unclear what “its” is referring to.
- Claim 2, lines 5-6 recite the limitation “a vehicle”. It is unclear whether this newly recited "a vehicle" is different from the one, which is first recited on line 4 of claim 2.
- Claim 2, line 11 recites the limitation “its”. It is unclear what “its” is referring to.
- Claim 3, line 3 recites the limitation “a cover gear”. It is unclear whether this newly recited "a cover gear" is different from the one, which is first recited on either line 11 of claim 1 or line 11 of claim 2.
- Claim 3, line 4 recites the limitation “a piston gear”. It is unclear whether this newly recited "a piston gear" is different from the one, which is first recited on either line 12 of claim 1 or line 12 of claim 2.
- Claim 4, line 4 recites the limitation "the amount of oil". There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. **Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by U. S.**

**Patent Application Publication No. US 2003/0121750 A1 to Teraoka.**

Claims 1 and 2:

Teraoka (Figs. 1A-4; paragraphs [0020] to [0119]) discloses a differential apparatus comprising:

- A body section (i.e., Fig. 1, element 19) having a fixed cover (i.e., Fig. 1, element 17);
- A first side pinion gear (i.e., Fig. 1, element 29) arranged inside of the body section (19) and connected with a driving shaft of a vehicle (i.e., paragraph [0031]);
- A second side pinion gear (i.e., Fig. 1, element 31) rotatably connected with a driving shaft of vehicle opposite to said first side pinion gear (i.e., paragraph [0031]);
- A pair of differential pinion gears (i.e., Fig. 1, elements 27) each of which is rotated in engagement with the first side pinion gear (29) and second side pinion gear (31);
- First friction plates (i.e., Fig. 1, elements 45) arranged at rear sides of the first side pinion gear (29) and second side pinion gear (31);
- Second friction plates (i.e., Fig. 1, elements 35) arranged rear sides of the differential pinion gears (27); and
- A pressure generating device (i.e., Fig. 1) constructed such that a cover gear (i.e., Fig. 1, element 57) and a piston gear (i.e., Fig. 1, element 47) engage with the second side pinion gear (31) and first side pinion gear (29), respectively, and can be displaced away from each other in a longitudinal direction of the device.

***Allowable Subject Matter***

10. Claims 3 and 4 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Kuroki (U. S. Patent No. 5,910,064) teaches a differential apparatus, as shown in Fig. 3.
- Binkley (U. S. Patent No. 4,838,118) teaches an anti-spin differential, as shown in Fig. 1.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Le whose telephone number is 571-272-7092. The examiner can normally be reached on Mon-Fri (0900-1730).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David D. Le/  
Primary Examiner, Art Unit 3681  
09/23/2008

ddl